



PEXTO

MACHINES AND TOOLS FOR SCHOOL SHOPS



Photo Courtesy Flint Junior College, Flint, Michigan

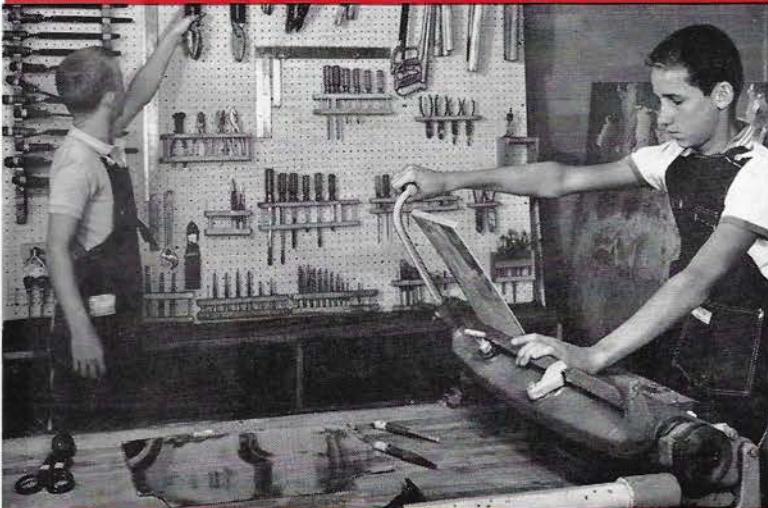
* Registered trademark

PEXTO
Since 1785

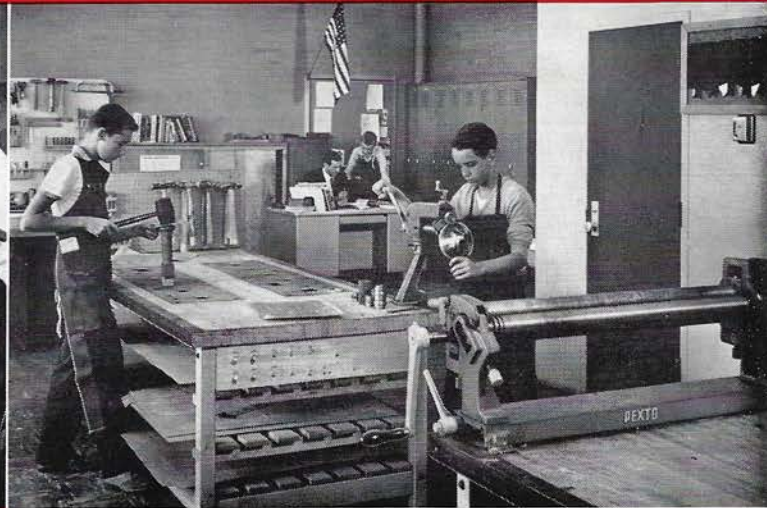
THE STANDARD FOR SHEET METAL WORK IN TRAINING AND INDUSTRY

IN THE CLASSROOM TODAY the **PEXTO** machines and tools they will use on the job tomorrow

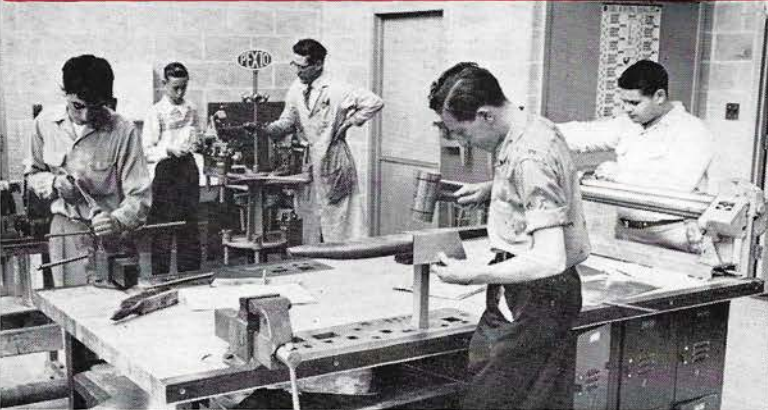
PEXTO Bench-Mounted Bar Folder showing logical arrangement for hand tools with everything in place.



Students working on sheet metal bench, steel racks below—bench plates, stake and rotary machine in place. PEXTO slip Roll Former, properly mounted with roll release lever and operating handles projecting over edge of bench.



Another modern school shop well equipped with PEXTO machines and tools.



Student working on PEXTO equipment on Holdall revolving machine standard.

PEXTO Foot Squaring Shear with sheet metal bench in background. PEXTO Bench Plates and selection of stakes in use.

Photos on this page upper left and right, courtesy of Wethersfield High School, Wethersfield, Conn. Left, center and lower, courtesy of Warwick Veterans Memorial High School, Warwick, R. I.

SHEET METAL WORKING . . .

as a valuable vocational subject

THE BRIGHT FUTURE OF SHEET METAL WORK

Never, in the history of this important industry, has its future expansion been so definitely indicated. Fabricated sheet metal, replacing less adaptable, less flexible materials, is in growing demand for Heating and Air Conditioning, Building and many Industrial applications. New construction alone will require a tremendous tonnage of sheet metal and more schools, tools, machines and skilled workers for its fabrication.

SCHOOLS HELP ADVANCE INDUSTRIAL PROGRESS

It is very evident that Sheet Metal Working school shops must develop more trained men to meet the demand. To do so, more schools must be built, classes enlarged in present schools, more and better equipment installed, more shop instructors obtained. Definite progress is being made through today's modern schools but the sheet metal field will need more and better trained students. PEXTO, through this manual, and with its representatives in the field, offers complete cooperation with school instructors and executives to help your school shop meet its growing requirements.

THE BENEFITS OF LEARNING WITH PEXTO

The boy in the classroom today and the man on the job tomorrow have one thing in common . . . they learn and earn on PEXTO machines and tools. And that applies in building construction and industry . . . wherever sheet metal is fabricated. Familiarity with these machines and tools will make him a better skilled worker faster . . . an advantage in every way.

EXTRA SAFETY

Over the years, PEXTO, the pioneer of sheet metal working machinery and tool design, has been especially concerned with safety features. You may be assured that extra safety is built into all PEXTO equipment whether used by inexperienced young students or by qualified mechanics in industry.

PEXTO

*The Standard for Sheet Metal Work
in Training and Industry*

A COMPLETE LINE

The PEXTO line includes every machine and tool, specifically designed to perform all operations required in the finest sheet metal fabrication school shops . . . and in commercial shops everywhere. Whenever possible, new designs are introduced and protective and time-saving features are added. PEXTO Foot Squaring Shears, for instance, have made history with thousands in operation, many for more than a century of service. There's no better paying investment for school shops than equipment stamped with the trademark PEXTO.

HERE'S HOW WE CAN HELP

NEW CONSTRUCTION

Today Secondary and Trade Schools have facilities for vocational arts instruction. PEXTO offers a complete School Service . . . available to Instructors, Architects, School Executives . . . for the selection of machines and tools, and recommends equipment to accommodate small or large classes. Included are bulletins, folders, catalog and other helpful literature.

EXPANSION

A definite advantage to schools in the early stages of their instruction classes is to select and install fabricating equipment on the PEXTO Progressive Expansion Plan. Basic tools and machines will be the initial investment; then, as classes expand, further equipment may be progressively installed to complete a fully standardized shop.

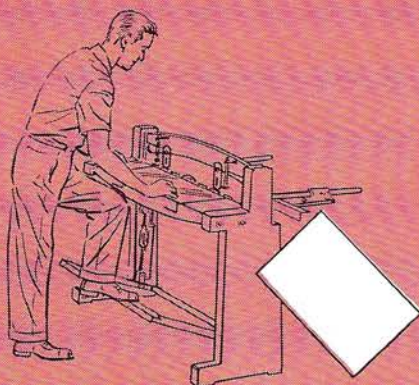
The PEXTO Progressive Plan spaces your investments, initially low. When adding new equipment or expanding into a larger area of floor space, write to our School Shop division. We are always ready to help you.

THE PECK, STOW AND WILCOX
COMPANY

School Shop Division
Southington Connecticut

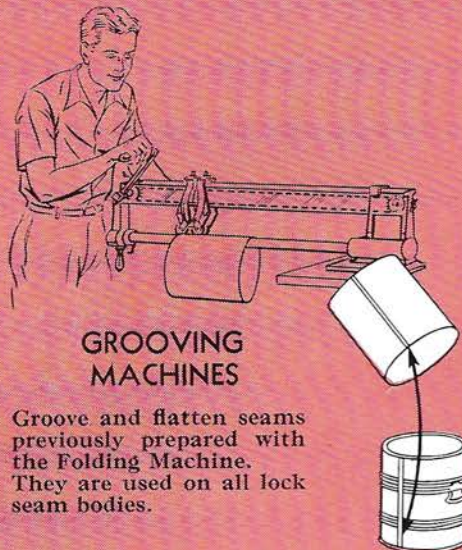
SHEET METAL WORKING MACHINERY APPLICATION

... for schools, shops and general industries



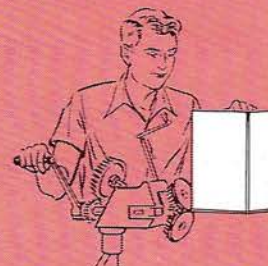
SQUARING SHEARS

Used for trimming and squaring sheet metal.



GROOVING MACHINES

Groove and flatten seams previously prepared with the Folding Machine. They are used on all lock seam bodies.

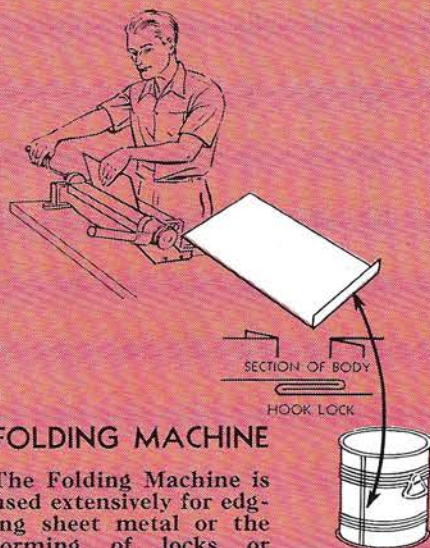
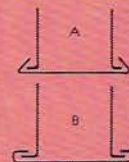


A—This shows how bottom edge of body, and bottom of Can are prepared by Burring Machine for Setting-Down.

B—The Pexto Setting Down Machine closes the seam as shown here. It works both speedily and accurately.

SETTING DOWN MACHINE

The Setting Down Machine prepares the seams in body of vessels for double seaming.



FOLDING MACHINE

The Folding Machine is used extensively for edging sheet metal or the forming of locks or angles.



AA—Showing edges turned by Pexto Burring Machine. Note right-angle burr on body of can, and a still more pronounced burr on the bottom piece. The edge on bottom is turned smaller than on the body.

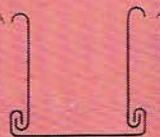
BURRING MACHINE

A difficult operation to master but practice will produce uniform flanges on sheet metal bodies. Prepares the burr for bottoms preparatory to setting down and double seaming.

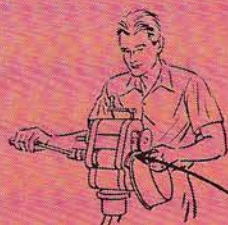


TURNING MACHINE

Used to prepare a seat in bodies to receive a wire. The operation is completed with use of Wiring Machine.

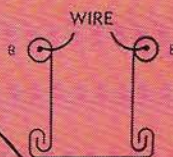


AA—Seats for Wire—made on the Turning Machine.



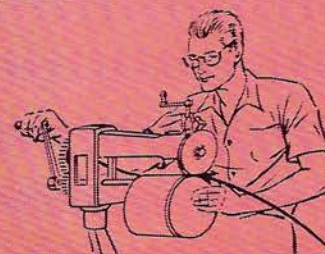
WIRING MACHINE

Works the metal completely and compactly around wire. Depending on shape of work, seats to receive wire are prepared on Folder, Brake or Turning Machine.



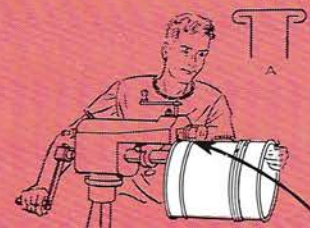
FORMING MACHINES

Used for forming flat sheets into cylinders of various diameters such as stove pipe, the bodies of vessels, cans, etc. Made in a variety of sizes and capacities.



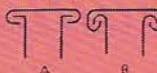
DOUBLING SEAMING MACHINE

Offered in various styles and follows the setting down operation.

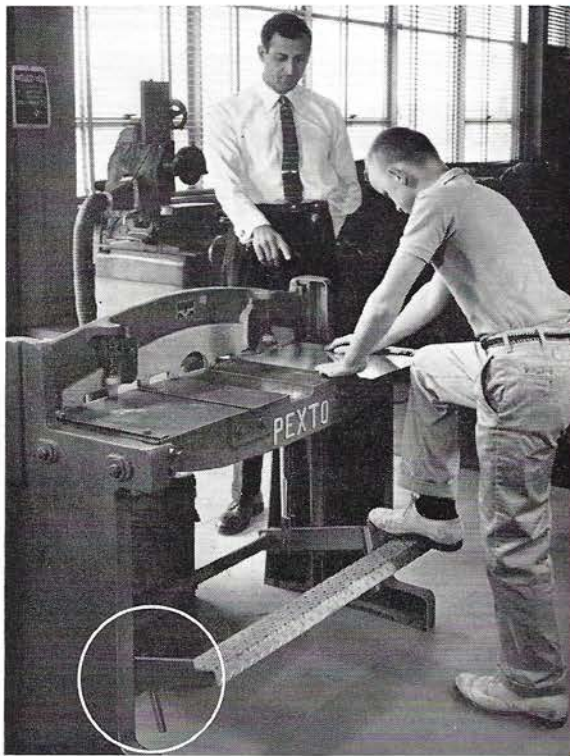


BEADING MACHINE

For ornamenting and stiffening sheet metal bodies.



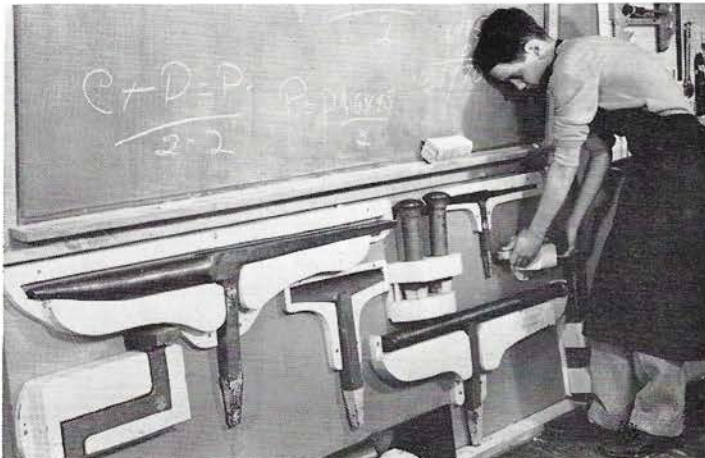
SHOP HINTS FOR INSTRUCTORS



When requested PEXTO will furnish a treadle stop which prevents the foot treadle of the foot shear from lowering completely to the floor. This eliminates chance of injury to any student's foot.



Note how the shop instructor has attached a metal stock chute to the shear. Extra metal pieces fall into a container instead of on the floor.



All PEXTO equipment is finished in Pittsburgh Dynamic safety coloring system. Finished castings are Vista Green ... all moving parts in contrasting yellow.

A place for everything and everything in its place ... neatly. Here PEXTO stakes are stored in wall racks ... color coded to identify the stakes as sheet metal working equipment.

A GUIDE TO THE SELECTION OF SCHOOL SHOP

PEXTO MACHINES

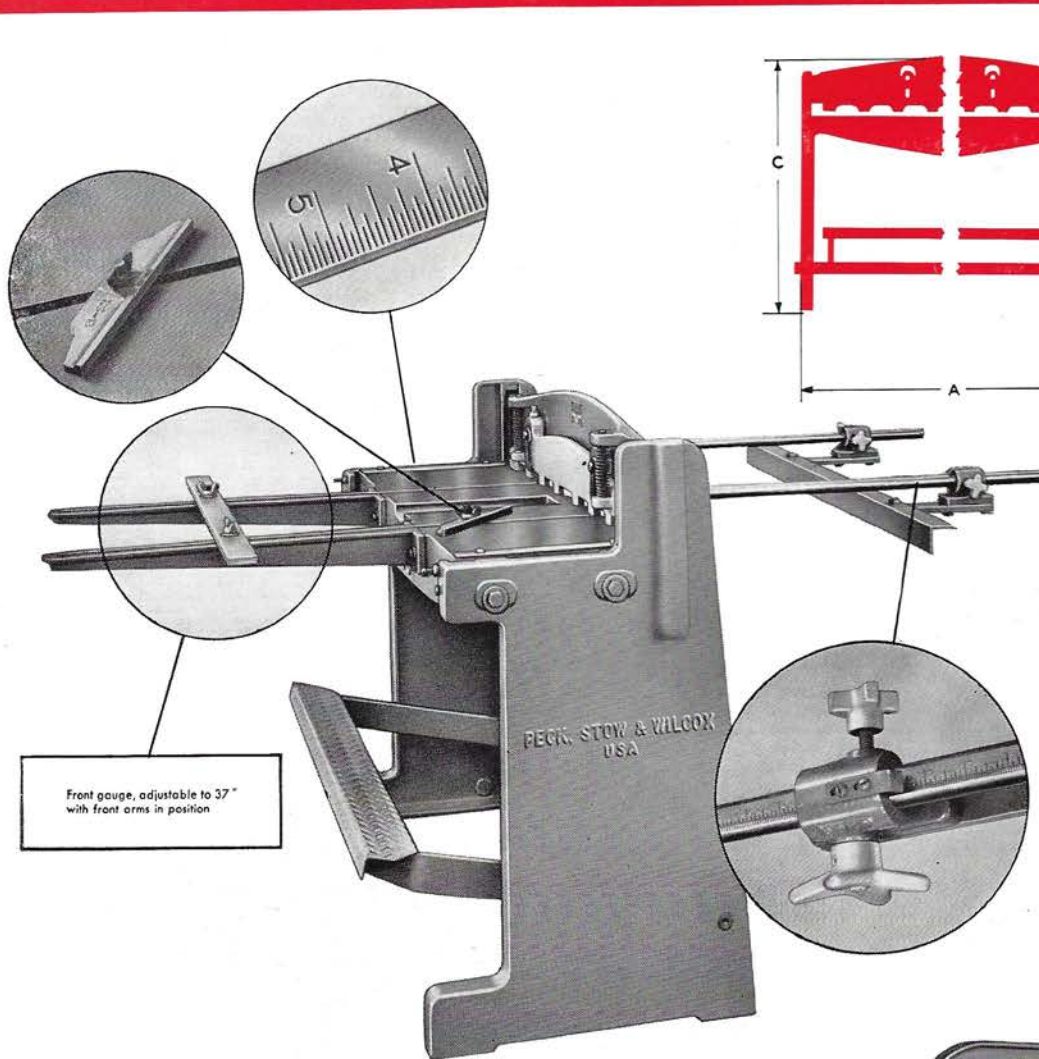
MACH. NO.	MACHINES	PLAN NO. 1	PLAN NO. 2	PLAN NO. 3
137	36" Squaring Shear with Holddown, Encased Springs, Back Gauge and Front Gauge.	1	1	1
63	30" Adjustable Bar Folder with Encased Counterbalance.	1		1
696	36" Combination Brake and Folder for bench use.	1	1	1
381	36" x 2" Slip Roll Forming Machine with Encased Steel Machine-cut Compensating Gears.	1	1	1
520	36" Rapid Grooving Machine.	1	1	
299	Ring and Circle Shear.	1	1	
676	15" Throat Samson Lever Punch with $\frac{1}{4}$ ", $\frac{5}{16}$ ", and $\frac{3}{8}$ " Punches and Dies.	1		
737	Notching Machine.	1		
2544	Turning Machine with "A" and "B" Turning Rolls.	1	1	
3544	Burring Machine with Extra Upper "C" Rolls.	1	1	
4544	Wiring Machine for "D" Wiring Rolls.	1	1	
5544	Elbow Edging Machine with No. 1 Elbow Roll.	1		
576	Burring Machine $1\frac{1}{2}$ " Diam. Rolls.	1		1
561	Setting Down Machine.	1	1	
644	$15\frac{1}{2}$ " Throat Double Seaming Machine.	1	1	
622	Deep Throat Comp. Machine with $\frac{1}{4}$ " Single Bead Rolls and Slitting Cutters.	1	1	1
0585	Combination Crimping and Beading Machine—20 Gauge.	1		
402	Brace and Wire Bender,—Cap. $\frac{1}{4}$ " x 2" Band Iron.	1		
1544	Combination Bench Machine with "A" and "B" Turning Rolls, "C" Burring Rolls, "D" Wiring Rolls and Bench Standard.			1
540	Turning Machine.	1		1
0581	Combination Crimper and Beader—24 Gauge.		1	1
1	Elbow Edging Rolls for No. 1544.	1		

PEXTO TOOLS

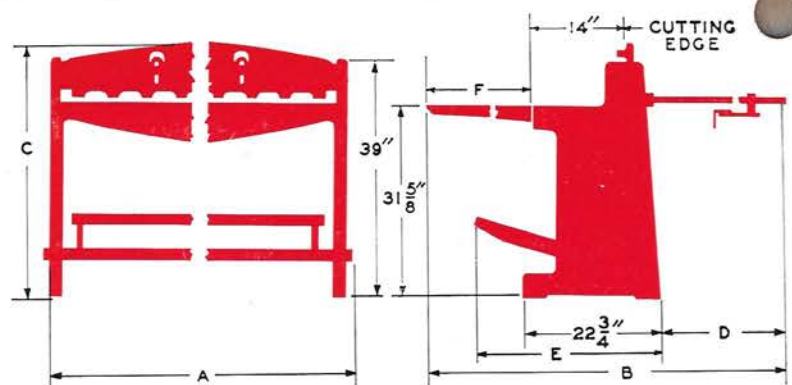
TOOL NO.	STAKES AND BENCH TOOLS	PLAN NO. 1	PLAN NO. 2	PLAN NO. 3
910	40" Hollow Mandrel Stake.	1	1	1
961	34½" Solid Mandrel Stake.	1		
949	Double Seaming Stake with 4 Heads.	1	1	
921	Double Seaming Stake.	1		
901	Beakhorn Stake.	1	1	
943	Hatchet Stake.	1	1	1
925	Common Blowhorn Stake.	1	1	
957	Needle Case Stake.	1		
956	Candle Mould Stake.	1		
927	Creasing Stake with Horn.	1		
971	Conductor Stake.	1	1	
964	Universal Stake Holder & Stakes (Beakhorn, Blowhorn, Creasing with Horn, Double Seaming, Conductor, Candle Mould & Needle Case)			1
965	Round Head Stake.	1	1	
953	Bottom Stake.	1	1	
935	Coppersmith Square Stake.	1	1	1
936	Common Square Stake.	1		
932	Bevel Edge Square Stake.	1	1	
981	37½" x 8" Stake Bench Plates.	4	3	1
793	Handy Seamers—3½" Blade.	3	3	2
44	Compound Lever Bench Shear.	1	1	
81	Scroll Snips.	2	1	1
15	Hawks Bill Snip.	3	1	1
C9	3" Cut, Curved Blade Snip.	3	1	1
9	3" Cut, Combination Snip.	3	1	1
9	3" Cut, Straight Snip.	1	1	1
4	28 Oz. Raising Hammers.	3	1	1
46	Rivet Sets. (3 ea., 1, 2, 3, 4, 5, 6, 7, 8)	3	2	1
DD88	Solid Punches	3	2	1
	Set, Hand Groovers (3 ea., 0, 2, 4)	3	2	1

TOOL NO.	INDIVIDUAL HAND TOOLS	PLAN NO. 1	PLAN NO. 2	PLAN NO. 3
9	3" Cut, Straight Blade Snip.	1	1	1
2	1" Face Riveting Hammer.	1	1	1
3	⅝" Face Setting Hammer.	1	1	1
22	Scratch Awl.	1	1	1
35	10" Wing Divider.	1	1	1
DD11	Center Punch.	1	1	1

PEXTO machines for cutting and slitting sheet metal



Front gauge, adjustable to 37" with front arms in position



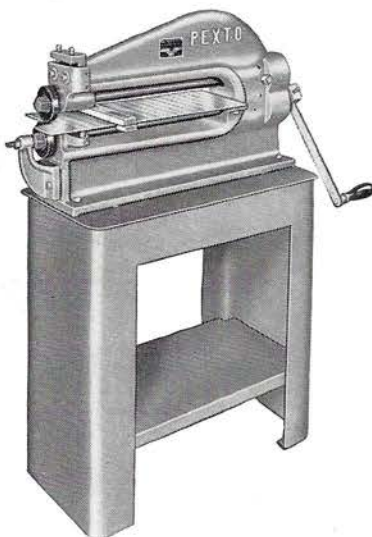
For straight shearing of squared or mitered blanks up to 16 gauge metal, we offer a line of precision foot operated squaring shears. Ask for Bulletin 157.

SPECIFICATIONS

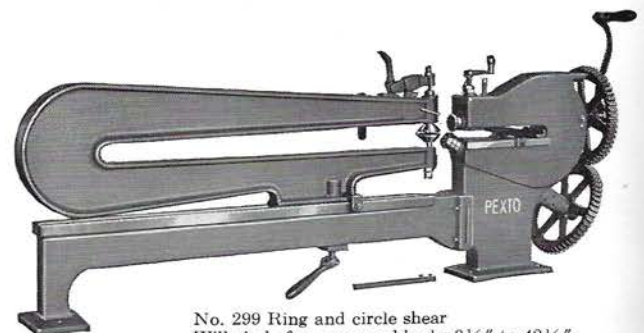
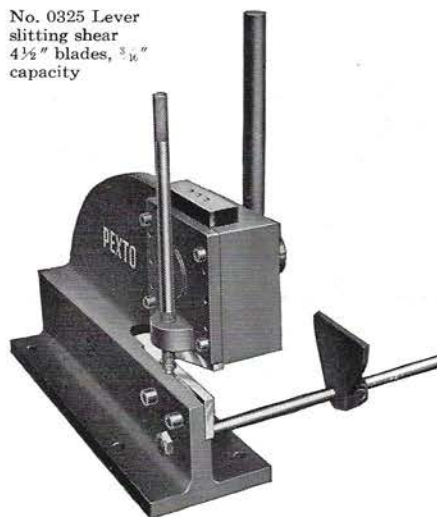
SHEAR	A	B	C	D	E	F	Appr. Ship. Wgt.
132*	39 3/8"	69 1/4"	39 3/8"	29 1/2"	27 1/4"	19 5/8"	540
137	45 1/8"	75 3/8"	40 1/4"	29 1/2"	27 1/4"	26 1/4"	650
142	50"	76 1/4"	41 3/8"	29 1/4"	30 3/4"	26 1/4"	783
152	60"	75 3/8"	42 1/4"	29 1/4"	34 1/4"	26 1/4"	1130

*No. 132 Shear furnished without holddown.

No. 255 Rotary slitting shear
Depth cutting head: 18"
Capacity: No. 16 Gauge



No. 0325 Lever slitting shear
4 1/2" blades, 3/16" capacity



No. 299 Ring and circle shear
Will circle from square blanks 3 1/4" to 42 1/2"
Capacity: No. 20 Gauge

No. 269—18 1/4" Throat scroll shear
Capacity: No. 20 Gauge



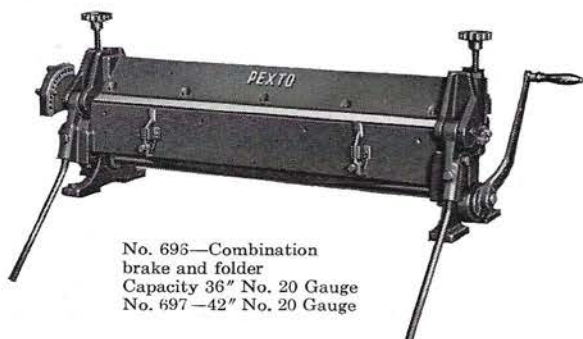
PEXTO machines for bending and forming sheet metal



No. 381—36" X 2" Slip roll forming machine
Capacity No. 22 Gauge
No. 382—30" X 2" Capacity No. 22 Gauge



No. 63—30" Adjustable bar folder
Will form closed or open locks; widths $\frac{1}{8}$ " to 1"
Capacity No. 22 Gauge maximum



No. 696—Combination
brake and folder
Capacity 36" No. 20 Gauge
No. 697—42" No. 20 Gauge



No. 644—15 $\frac{1}{2}$ " Throat
double seaming machine
Smallest diameter of work
full depth 4 $\frac{3}{8}$ "
Capacity No. 26 Gauge



No. 402 Brace and wire
bender
Maximum capacity
 $\frac{1}{4}$ " X 2" soft steel
Wire groove sizes $\frac{1}{4}$ ", $\frac{3}{16}$ ",
 $\frac{1}{8}$ ", $\frac{3}{32}$ "



No. 0585 Crimping
and Beading Machine,
20 gauge capacity.
Can be used for
combined crimping
and beading or for
crimping only.



No. 0581 Crimping and
Beading machine, 24 gauge
capacity. Can be used for
combined crimping and
beading or crimping only.

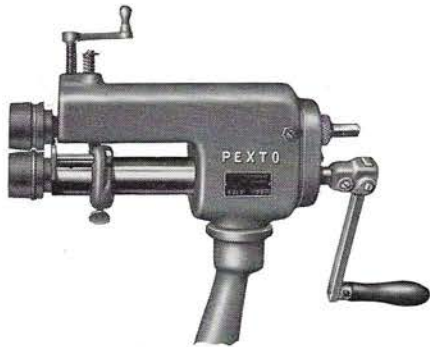


No. 540 Small Turning or No. 576
Small Burring Machine.



No. 561 Setting Down Ma-
chine for setting down
single seam prior to double
seaming operation.

PEXTO combination rotary machines with PEXTITE rolls



No. 622—Deep throat combination rotary machine



No. 1544—Throatless combination rotary machine

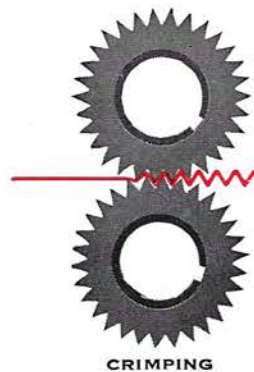
True reversible combination machines driven through upper or lower arbor. Can be gauged from either side. Below are standard rolls available in the famous PEXTITE finish for tight grip, positive feed. All rolls are interchangeable and can be used on either machine except Ogee Bead, Single Bead and Furnace collars edging which fit only Deep Throat No. 622.



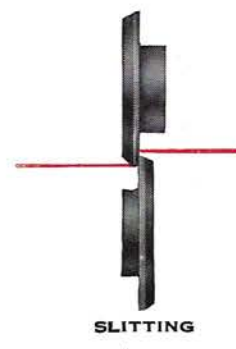
THIN TURNING



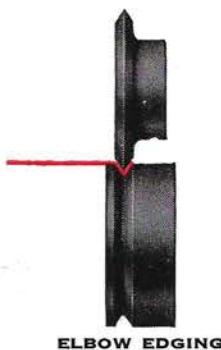
THICK TURNING



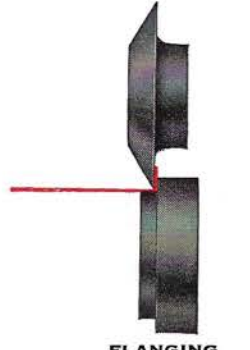
CRIMPING



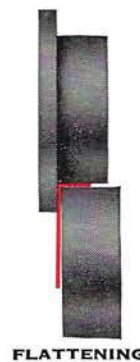
SLITTING



ELBOW EDGING



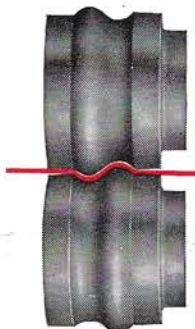
FLANGING



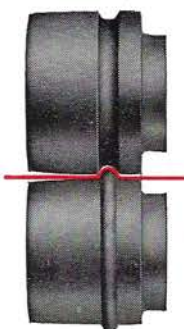
FLATTENING



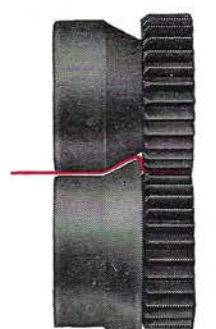
BURRING



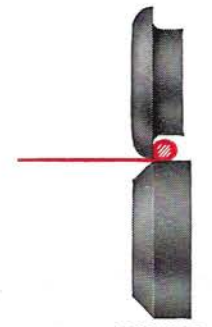
OGEE BEADING



SINGLE BEADING



FURNACE COLLAR
EDGING



WIRING

PEXTO stakes and bench plates



No. 964—Universal stake holder and stakes—complete set



No. 901—Beakhorn stake
21½" X 16½"



No. 949—Double seaming stake with 4 heads



No. 965—Round head stake
Head 3" diameter



No. 936—2½" X 4½"
Common square stake



No. 994—48" Straight edge
No. 995—96" Straight edge
No. 0995—120" Straight edge



No. 943—13"
Hatchet stake



No. 927—Creasing stake with horn
6¾" X 12"



No. 957—Needle case stake
10½" X 8"



No. 951—Bench plate or stake holder,
37½" X 8"

No. 982—Bench plate or stake holder,
30" X 8"



No. 935—2½" X 4½"
Coppersmiths
Square stake



No. 953
1¼" Bottom stake



No. 925—Common blowhorn stake
18" X 9"



No. 910—40" Hollow mandrel stake

No. 911—60" Hollow mandrel stake



No. 971—Conductor stake
11½" X 15"



No. 921—Double seaming stake
12" X 17"



No. 956—Candle mould stake
18½" X 9½"



No. 932—2½" X 4½"
Bevel edge square
stake



No. 961—34½" Solid mandrel stake

